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Proposed

AIR OPERATING PERMIT WA 000092-2

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In compliance with the provisions of The State of Washington
Clean Air Act Chapter 70.94 Revised Code of Washington

Port Townsend Paper Corporation
P.O. Box 3170
Port Townsend, Washington 98368

is authorized to emit in accordance
with the terms and conditions
of this permit.

Issued by:

State of Washington
DEPARTMENT OF ECOLOGY
300 Desmond Drive
P.O. Box 47600
Olympia, Washington 98504-7600

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INTRODUCTION AND LEGAL AUTHORITY

In Title 70, Chapter 94, Section 161 of the Revised Code of Washington, our State Legislature directs the Department of Ecology (Ecology) "...to require renewable permits for the operation of air contaminant sources." Ecology defined common elements of such required Air Operating Permits (AOPs) to comply with the goals of the Federal Clean Air Act (FCAA). Ecology published those permit elements in the Washington Administrative Code [Chapter 173-401 WAC]. An AOP prescribes emissions limitations, operating requirements, monitoring and recordkeeping requirements, and reporting frequencies for the permitted source.

The FCAA requires the Port Townsend Paper Corporation (PTPC) to obtain a Title V Air Operating Permit because the facility emits or has the potential to emit during a year, one hundred tons or more of listed air pollutants [WAC 173-401-300(1)].

Port Townsend Paper uses the methods prescribed in this AOP to show its compliance with underlying air pollution control requirements. The permittee shall submit a report certifying its compliance with the terms and conditions contained in this AOP, in accordance with Facility-Wide General Requirements, including certifying compliance with all applicable requirements identified in Standard Terms and Conditions.

During the drafting of this permit Ecology staff attempted to incorporate requirements using the exact language of the law, regulation, or order. Where there is a difference in language, this difference is presented in this permit only for clarification of the underlying requirement. The legal requirement remains the underlying requirement. Any conflict between the permit and an underlying requirement that is not acknowledged in this permit or its Support Document, nor addressed in past orders or permits referenced in this permit or its Support Document, will be resolved by referring to the underlying requirement. Unless otherwise stated, the effective date of referenced regulations or statutes is that of the provision in effect on the date of permit issuance. Compliance with underlying requirements shall be demonstrated using the methods specified in this Permit or the support document.

The Title V Air Operating Permit consists of all parts of this assembled document, including its footnotes and Appendices, but includes neither the accompanying support document, nor the Title V permit application materials submitted by PTPC nor any other past orders or permits.

The definition of terms contained in WAC 173-401-200, and as defined in all referenced regulations, applies to this permit unless otherwise defined in the permit.

EMISSION UNIT SPECIFIC REQUIREMENTS [WAC 173-401-600]

This section contains requirements applicable to described units. General requirements that apply to monitoring, recordkeeping and reporting for these limits are in the Facility-Wide section of this Permit. Monitoring and reporting requirements that are specific to each limit are listed in the emission unit specific tables, and should be read in conjunction with the general requirements. Unless specified otherwise, the basis of authority for the type and frequency of monitoring imposed is WAC 173-401-615.

Refer to Appendix B for emission estimate algorithms. These algorithms set forth the manner by which emissions are calculated for those requirements for which the Reference Method itself does not directly result in an emission estimate. The Permittee may use an equivalent alternative method with written approval from Ecology.

PTPC shall comply with the remaining applicable MACT I (Phase II HVLC) standards as described in 40 CFR 63.443 and 63.447 (CCA Alternative), and as listed in this Permit, not later than the April 15, 2006, compliance date, unless an extension is granted.

A. Recovery Furnace

| | Parameter | Limit (shall not exceed) | Monitoring & Reporting ¹ | Applicable Requirements |
|------|------------------------------|---|---|--|
| A.1 | Particulate and HAP (metals) | 0.044 gr/dscf at 8% O ₂ except during periods of Startup, Shutdown and Malfunction | EPA Method 5 is the reference test method. Monitor opacity per A.7 as surrogate except during SSM periods ¹¹ . (See 40 CFR 63.6 subpart F). | [40 CFR 63.862(a)(1)(i)(A)] for PM surrogate HAP limit. [40 CFR 63.865(b)(1)] for test method. [40 CFR 63.6(f)] for SSM allowance. |
| A.2a | Particulate | 0.08 gr/dscf @ 8% O ₂ , one hour average. | Sample monthly ² using EPA Method 5 except that the permittee may conduct one test of at least one hour in lieu of three 1-hour tests. Report test results monthly. Refer to Condition A.7 for minimum O&M requirements intended to indicate compliance with the particular limit. | [Order DE 00AQIS-131] for limit and monitoring (Table 1, A.1a) |
| A.2b | | 0.10 gr/dscf @ 8% O ₂ , one hour average. | Same as for previous limit. | [WAC 173-405-040(1)(a)] for limit |

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| A.2c | Operating Parameters | No limit – report defined source test parameters | Report the following parameters in the monthly air report: <ol style="list-style-type: none"> 1. Average opacity during each source test run. 2. Sufficient data to allow verification of source test results. 3. Air flow split between ESP chambers. 4. Average black liquor flow rate, density, and % solids during source test. 5. As alternative to #4, PTPC can estimate the total solids fired during the source test run. 6. Log, every hour during the source test, primary and secondary voltage and current, and spark rate (if available) for each TRC unit. | [Order DE 05AQIS-2892] for operating parameter, recording, and reporting requirements. |
| A.3 | Opacity | 35% average for more than 6 consecutive minutes in any 60 minute period. | Monitor continuously using an approved CEM that conforms to 40 CFR 60, App. B, Perf. Spec. 1. Report excursions monthly ¹¹ . | [WAC 173-405-040(6)] for opacity limit. for continuous monitoring requirement. |
| A.4 | Opacity | 20% for average of 10 consecutive 6-minute averages except during periods of Startup, Shutdown and Malfunction | Implement corrective action per the SSM Plan when monitoring exceedance occurs. Monitor continuously using an approved COM that conforms to 40 CFR 63.864(d)(1)-(4) and 63.6(h) and 63.8 ¹¹ . Compliance may also be determined using EPA Method 9. Report excess emissions quarterly per 40 CFR 63.867(c). See footnote 1a. Refer to Condition A.4 Report excess emissions quarterly per 40 CFR 63.867(c). | <p>[40 CFR 63.864(k)(1)(i)] for 20% limit.</p> <p>[40 CFR 63.864(d)(1)-(4) and 63.6(h) and 63.8] for COM requirement</p> <p>[40 CFR 63.867(c)] for quarterly excess emissions reporting.</p> |
| A.5 | Opacity | 35% for 6% or more of the operating time within any quarterly period except during periods of Startup, Shutdown and Malfunction | Same as for previous limit. | [40 CFR 63.864(k)(2)(i)] for 35% limit. |

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| A.6a | SO ₂ | 200 ppm @ 8% O ₂ , one hour average. | EPA RM 6 is the reference method except that the permittee may conduct one 1-hour test in lieu of three 1-hour tests. Report test results in following monthly report ² . | [PSD-I (Condition 2)] (for limit only) |
| A.6b | | 500 ppm @ 8% O ₂ , one hour average. | Same as for previous limit. | [WAC 173-405-040(11)(a)]for limit. |
| A.7 | Monitor opacity with a COM as a compliance indicator as described in conditions A.3 and A.4 ¹¹ . Failure to take corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report corrective action and opacity excursions monthly. (WAC 173-401-615) | | | |
| A.8 | <p>In addition to source test data submitted for the recovery furnace, the average opacity occurring during the source test run shall be reported with the results of the source test. Sufficient data from the source test shall be submitted to allow Ecology to make the calculations leading to the source test results. Such data shall be reported for each source test run. PTPC shall establish a means to determine the flow split between the ESPs. During each source test the flow split will be determined using this method and will be reported with the source test data.</p> <p>Black liquor flow rate, density, and percent solids shall be averaged and reported for the period of time of each source test run. As an alternative, the company can estimate the total solids fired during the source test run. Primary and secondary voltage and current, and spark rate (if available) for each TRC unit shall be logged every hour during the source test. This data shall be reported with the source test data. (Order DE 00AQIS-131 Condition 8)</p> | | | |
| A.9 | NESHAPS SSM | See Condition I for generic NESHAPS SSM Requirements. | | |

The following **state-only** requirements are not federally enforceable under the federal Clean Air Act:

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| A.13 | Particulate | 0.05 gr/dscf @ 8% O ₂ , one hour average. | Sample monthly ² using EPA Method 5 except that the permittee may conduct one test of at least one hour in lieu of three 1-hour tests. Report test results monthly. | [Order DE 00AQIS-131] (Table 1, A.1b) |
| A.14 | TRS | 5.0 ppm @ 8% O ₂ , 24 hour average except during periods of Startup, Shutdown and Malfunction | Monitor continuously using an approved CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 5. Report excursions monthly ¹¹ . | [WAC 173-405-040(1)(c)]for limit and Order DE 00AQIS-131 for monitoring and reporting (Table 1, A.4) |
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| A.15 | O ₂ | No limit - required to correct TRS data except during periods of Startup, Shutdown and Malfunction | Monitor continuously using an approved CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 3 ¹¹ . | [Order DE 00AQIS-131] (Table 1, A.5) |
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B. Smelt Dissolver Tank

| | Parameter | Limit (shall not exceed) | Monitoring & Reporting | Applicable Requirements |
|-----|-----------------------|---|---|---|
| B.1 | HAP (PM as surrogate) | Shall not exceed 0.20 lb/ton BLS as hourly avg except during periods of Startup, Shutdown and Malfunction | EPA Method 5 is reference method. Monitor scrubber flow as surrogate ¹¹ . Refer to B.4 for scrubber flow surrogate monitoring requirements. | [40 CFR 63.862(a)(1)(i)(B)] for PM surrogate HAP limit. [40 CFR 63.865(b)(1)] for test method. |
| B.2 | Particulate | 0.3 lbs/ton BLS, one hour average. | Sample monthly ² using EPA Method 5 or Ecology Method 8 except that the permittee may conduct one test of at least one hour in lieu of three 1-hour tests. Report test results monthly. | [WAC 173-405-040(2)] for limit. |
| B.3 | Opacity | 35% average for more than 6 consecutive minutes in any 60 minute period. | EPA Method 9 is the reference test method. Maintain scrubber shower flow ≥50 gpm. An excursion is defined as any hour in which scrubber flow is <50 gpm for more than six consecutive minutes. Monitor scrubber flow rate continuously ¹¹ ; record continuously; report excursions monthly. See Condition B.6 for excursion allowance. | [WAC 173-405-040(6)] for limit. |
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| B.4 | Scrubber Monitoring | Recirculation flow rate to SDT scrubber must meet the minimum level established during initial performance test parameter three-hour block average. | Continuously monitor pressure drop and recirculation flow. Report excursions in the monthly, quarterly and semi-annual reports. Pressure drop recorded at least once every 15 minutes at equally spaced intervals, or as an arithmetic or three-hour block average. ^{11,12} Maintain 3-hour scrubber recirculation rate equal or greater than 80 gpm established in IPT dated 9/10/04. Scrubber parameters may be modified by Ecology following additional performance testing to establish new set points. | [40 CFR 63.864(a)(2)] for pressure drop and flow rate monitoring [40 CFR 63.867(c)] and [40 CFR 63.10(c)] for reporting [40 CFR 63.8(c)(4)(ii)] for recording frequency. [40 CFR 63.8(g)(2)] for monitored data management requirements. [WAC 173-401-615(1)(c)]; [WAC 173-400-105(5)(h)]; and [40 CFR §63.8(c)(4)] for CMS data recovery. |
| B.5 | Scrubber Monitoring | Three-hour block average parameter value is outside the range established in IPT. | Implement corrective action as specified in the Start-up, Shutdown, and Malfunction Plan (SSMP) for any kraft recovery furnace, kraft smelt dissolving tank, kraft lime kiln, or sulfite combustion unit equipped with a wet scrubber when any three-hour block average parameter value is outside the range of values established in the IPT. | [40 CFR 63.864(c)(1)(ii)] for CA requirement. |
| B.6 | Scrubber Monitoring | Six or more monitoring parameter exceedances in a semiannual reporting period. | Sources equipped with a scrubber shall not have six or more monitoring parameter exceedances in a semiannual reporting period on each unit. A unit exceedance day is a 24-hour period in which one or more monitoring parameter exceedance(s) occur(s) on a specific emission unit. | [40 CFR 63.864 (c)(2)(iii)] for excursion allowance limitation. |
| B.7 | Monitor opacity with scrubber shower flow as a compliance indicator. Take corrective action immediately whenever scrubber flow is <50 gpm for 60 consecutive minutes. Failure to take corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report corrective action and opacity excursions monthly. (Order DE 00AQIS-131) | | | |
| B.8 | NESHAPS SSM | | See Condition I for generic NESHAPS SSM Requirements. | |

C. Lime Kiln

| | Parameter | Limit (shall not exceed) | Monitoring & Reporting | Applicable Requirements |
|------|-----------------------|--|---|--|
| C.1 | HAP (PM as surrogate) | Shall not exceed 0.064 gr/dscf @ 10% O ₂ except during periods of Startup, Shutdown and Malfunction | EPA Method 5 is the reference method. Monitor scrubber flow and pressure differential as surrogate parameters ¹¹ . Refer to C.10 for scrubber flow and scrubber pressure drop surrogate monitoring requirements. Take CA as required per C.11 when scrubber parameters fall outside of range established in IPT. | [40 CFR 63.862(a)(1)(i)(C)] for PM surrogate HAP limit. [40 CFR 63.865(b)(1)] for test method. |
| C.2 | Particulate | 0.13 gr/dscf @ 10% O ₂ , one hour average. | Sample monthly ² using EPA Method 5 or Ecology Method 8 except that the permittee may conduct one test of at least one hour in lieu of three 1-hour tests. Report test results monthly. | [WAC 173-405-040(3)(a)] for limit. |
| C.3 | Opacity | 35% average for more than 6 consecutive minutes in any 60 minute period. | EPA Method 9 is the reference test method. Ongoing compliance indicated by maintaining venturi pressure drop ≥ 8 inches of H ₂ O (gauge). An excursion is defined as any hour in which the pressure drop is < 8 inches of H ₂ O (gauge) for more than six consecutive minutes. Monitor scrubber pressure drop continuously; record continuously ¹¹ ; report excursions monthly. See Condition C.6. | [WAC 173-405-040(6)] for limit. |
| C.4 | SO ₂ | 500 ppm @ 10% O ₂ , hourly avg. | EPA Method 6 is the reference method except that the permittee may conduct one test of at least one hour in lieu of three 1-hour tests. Report test results monthly if testing occurs. | [WAC 173-405-040(11)(a)] for limit. |
| C.5a | TRS | 8 ppm @ 10% O ₂ , 12 hour average. | Monitor continuously using an approved CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 5. Report excursions ^{11,13} monthly. | [40 CFR 60.283 (a)(5)] and Order DE 05AQIS-2892 (Table 1, C.4) for limit. [40 CFR 60.284 (a)(2)] for CEM monitoring. [40 CFR 60.284 (c)(1)] for 12 hr avg. |
| C.5b | O ₂ | No limit - required to correct TRS data | Monitor continuously using an approved CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 3. | [Order DE 00AQIS-131] (Table 1, C.5) |

C.6 Monitor opacity with venturi pressure drop as a compliance indicator. Take corrective action immediately whenever the pressure drop is < 8 inches for 60 consecutive minutes. Failure to take corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report corrective action and opacity excursions monthly. (Order DE 00AQIS-131)

C.7 Stack Height shall be ≥ 31 meters before production exceeds 650 tons/D unbleached pulp. PTPC has certified stack height is ≥ 31 meters. Report if stack is shortened. (PSD I)

C.8 through C.9 Reserved.

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| C.10 | Operation | Pressure drop across lime kiln scrubber, and scrubber recirculation flow rate to lime kiln, must meet minimum level established during initial performance test-no later than the Sept. 2004, three-hour block average. | Continuously monitor pressure drop and scrubber recirculation rate. Report excursions in monthly, quarterly and semi-annual reports. Pressure drop recorded at least once every 15 minutes at equally spaced intervals, or as an arithmetic or integrated three-hour block average. ^{11,12,13} Note: Maintain 1-hour scrubber recirculation rate equal or greater than 90 gpm and maintain scrubber pressure drop equal or greater than 8" H ₂ O per 2003-2004 IPT. | [40 CFR 63.864(a)(2)] and [40 CFR 60.284(b)(2)(i)] for pressure drop and monitoring accuracy. [40 CFR 63.864(c)(ii)] for CA trigger. [40 CFR 64.3] for CAM applicability. [WAC 173-401-615(1)(c)]; [WAC 173-400-105(5)(h)]; [40 CFR 63.8(c)(4)] for CMS data recovery |
| C.11 | Scrubber Monitoring | Three-hour block average parameter value is outside the range established in IPT. | Implement corrective action as specified in the Start-up, Shutdown, and Malfunction Plan (SSMP) for any kraft recovery furnace, kraft smelt dissolving tank, kraft lime kiln, or sulfite combustion unit equipped with a wet scrubber when any 3-hour block average parameter value is outside the range of values established in the IPT. | [40 CFR 63.864(c)(1)(ii)] for CA requirement. |
| C.12 | Scrubber Monitoring | Six or more monitoring parameter exceedances in a semiannual reporting period. | Sources equipped with a scrubber shall not have six or more monitoring parameter exceedances in a semiannual reporting period on each unit. A unit exceedance day is a 24-hour period in which one or more monitoring parameter exceedance(s) occur(s) on a specific emission unit. | [40 CFR 63.864(c)(2)(iii)] for excursion allowance limitation. |
| C.13 | NESHAPS SSM | | See Condition I for generic NESHAPS SSM Requirements. | |

The following **state-only** requirements are not federally enforceable under the federal Clean Air Act:

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| C.14 a | TRS | 20 ppm @ 10% O ₂ , 24 hour average. | Limit met by meeting Condition C.5a. | [WAC 173-405-040(3)(c)] for limit. |
| C.14 b | | 80 ppm H ₂ S @ 10% O ₂ for more than 2 consecutive hours | Monitor TRS continuously using an approved CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 5 ¹¹ . Report excursions monthly (if the upper range of the monitor is less than 80 ppm, all off scale measurements shall be considered >80 ppm). All TRS monitored is considered H ₂ S for this limit. | [WAC 173-405-040(3)(b)] for basis of limit [Order DE 00AQIS-131] (Table 1, C.4) for basis of monitoring |

D. Power Boiler #10

| | Parameter | Limit (shall not exceed) | Monitoring & Reporting | Applicable Requirements |
|------|-------------|--|---|---|
| D.1 | Particulate | 0.10 lb/mmBtu, one hour average | Sample monthly ² using EPA Method 5 except that permittee may conduct one test of at least one hour in lieu of three 1-hour tests. Report test results monthly. See Condition D.6 for minimum O&M requirements intended to indicate compliance with the particulate limit. | [40 CFR 60.42(a)(1)] for limit. |
| D.2a | Opacity | Average 20% for more than 6 consecutive minutes in any 60 minute period, except for emissions due to soot blowing or grate cleaning for up to 15 minutes in 8 consecutive hours. | Reference method is EPA RM 9. Ongoing compliance indicated by maintaining scrubber quench H ₂ O flow ≥100 gpm, scrubber H ₂ O flow ≥100 gpm, and scrubber air flow ≥1300 cfm. An excursion is defined as any hour in which quench H ₂ O flow is <100 gpm, scrubber H ₂ O flow is <100 gpm, and/or scrubber air flow is <1300 cfm for more than six consecutive minutes. Monitor quench H ₂ O flow, scrubber H ₂ O flow, and scrubber air flow continuously ¹¹ ; and record continuously; report excursions monthly. Visually inspect baffle each scheduled maintenance down. Record results; report deficiencies and repairs made. | [WAC 173-405-040(6)] for basis of limit. [WAC 173-400-105(5)(a)(i)] for continuous monitoring requirement. EPA approval letter dated March 2000 for basis of alternative opacity monitoring. |

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| D.2b | | Average 20% for more than 6 consecutive minutes in any 60 minute period, except for one six minute period of not more than 27% opacity. | Same as for previous limit. | [40 CFR 60.42(a)(2)] for limit. [40 CFR 60.45(a)] for monitoring. |
| D.2c | | Salty hog fuel shall not be burned. | Monitor hog fuel shipments. Report any salty hog fuel burned on monthly report. | [Order DE 00AQIS-131] |
| D.3a | SO ₂ | 0.8 lb/mmBtu, 3 hour average | Maintain fuel receipts showing all oil fired was ≤0.76% sulfur. Report all occasions when fuel with S content >0.76% burned. | [40 CFR 60.43(a)(1)] for limit. [40 CFR 60.45(g)(2)] for averaging period. [40 CFR 60.45(b)(2)] and [Order DE 05AQIS-2892] for fuel sampling. |
| D.3b | | 1000 ppm @ 7% O ₂ , hourly average. | Maintain fuel receipts showing all oil fired was ≤2% sulfur. Report all occasions when fuel with S content >2% burned. | [WAC 173-405-040(11)(b)] for basis of limit. |
| D.4 | NO _x | 0.30 lb/mmBtu, over any 3-hour period as average of three contiguous one-hour | Monitor continuously using an approved CEM ^{11,14} that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 2. Report excursions monthly. | [40 CFR 60.44] for limit. [40 CFR 60.45(g)(3)] for averaging interval. [40 CFR 60.45(a)] and [40 CFR 60.13(d)] for monitoring. |
| D.5 | O ₂ | No limit - required to correct NO _x data except during periods of Startup, Shutdown and Malfunction | Monitor continuously using an approved CEM ^{11,14} that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 3. | [40 CFR 60.45(a)] for oxygen monitoring. |
| D.6 | Monitor opacity with scrubber quench H ₂ O flow, scrubber H ₂ O flow, and scrubber air flow as a compliance indicator. Take corrective action immediately whenever scrubber quench H ₂ O flow is <100 gpm and/or scrubber H ₂ O flow is <100 gpm and/or scrubber air flow is <1300 cfm for 60 consecutive minutes. Failure to take corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report corrective action and opacity excursions monthly. (Order DE 00AQIS-131) | | | |

D.7 Stack Height shall be ≥ 53 meters before production exceeds 650 tons/D unbleached pulp. PTPC has certified stack height is ≥ 53 meters. Report if stack is shortened. (PSD I)

D.8 Power Boiler #10 shall comply with all the applicable requirements of the new source performance standards for fossil-fuel-fired-steam generators in 40 CFR Part 60 Subpart D. (Order DE 00AQIS-131)

Compliance with 40 CFR Subpart D SO₂ emission limits shall be met using fuels receipts until such time as:

- a. 40 CFR 60.45(d) describing a fuel monitoring program is completed, or
- b. PTPC receives EPA approval of an alternative monitoring method. Before using this option, PTPC shall submit a copy of the EPA approval letter with the approved alternative monitoring program and reporting requirements to the Department.

Should a or b occur, the permit will be opened and the condition will be revised to reflect the EPA requirements.

D.9 Power Boiler #10 shall comply with the applicable requirements of the National Emissions Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters (40 CFR 63, Subpart DDDDD) by the compliance date which is September 13, 2007.

E. Package Boiler

| | Parameter | Limit (shall not exceed) | Monitoring & Reporting | Applicable Requirements |
|------|---------------------------------------|--|--|---|
| E.1a | Particulate matter (PM) | 0.10 lb/mmBtu, 30 day rolling average, (see footnote 4e), excluding start-up (See footnote 5e) | Sample monthly using EPA Method 5. Report monthly. | PSD 96-01A conditions 3, 7, 13. PSD 96-01A condition 12(c)(1). |
| E.1b | | 56.3 tons/yr | Calculate using the average of Method 5 test results collected during the year and using the calculation found in Appendix B. Report annually. | PSD 96-01A condition 3. |
| E.1c | | 0.2 gr/dscf @ 7% O ₂ , one hour average. | Same as for 0.010 lb/mmBtu limit. | [WAC 173-405-040(5)(a)] for limit. |
| E.2a | Particulate matter <10 microns (PM10) | 0.086 lb/mmBtu, 30 day rolling average(see footnote 4e), excluding start-up (See footnote 5e) | Calculate by multiplying PM result by 0.86. Report monthly. | PSD 96-01A conditions 4, 7, 12(c)(2), and 13. |

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| E.2b | | 48.4 tons/yr | Calculate using the average of monthly results calculated during the year and using the calculation found in Appendix B. Report annually. | PSD 96-01A condition 4. |
| E.3a | Opacity | Average 15% for more than 6 consecutive minutes in any 60 minute period, except for emissions due to soot blowing or grate cleaning for up to 15 minutes in 8 consecutive hours (See footnote 5e) | Monitor continuously using an approved CEM ¹¹ that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 1. Compliance may also be determined using EPA Method 9. Report excursions monthly. Report monthly the daily maximum opacity. | PSD 96-01A conditions 5, 8, 13. PSD 96-01A Condition 12(c)(3). |
| E.3b | | Average 20% for more than 6 consecutive minutes in any 60 minute period, except for emissions due to soot blowing or grate cleaning for up to 15 minutes in 8 consecutive hours See footnote 5e. | Same as for previous limit. | WAC 173-405-040(6) for limit. |
| E.3c | | Average 20% for more than 6 consecutive minutes in any 60 minute period, except for one six minute period of not more than 27% opacity See footnote 5e. | Same as for previous limit. | 40 CFR 60.43b(f) for limit. 40 CFR 60.48b(a) for monitoring. |
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| E.4a | SO ₂ | 0.80 lb/mmBtu, 30 day rolling average | see footnote 2e | First Revision-DE 97AQ-I030 condition 4; and 40 CFR 60.42b(a) basis for limit [40 CFR 60.47b(b)(1), (3), & (4)] basis for monitoring |
| E.4b | | 1000 ppm @ 7% O ₂ , hourly average. | Maintain fuel receipts showing all oil fired was ≤0.50% sulfur. | [WAC 173-405-040(11)(b)] for limit. |
| E.5a | NO _x | 0.24 lb/mmBtu, 30 day rolling average (see footnote 4e). | Monitor continuously using an approved NO _x CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 2. Monitor O ₂ continuously using an approved CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 3. Calculate lb/mmBtu using formula found in 40 CFR Part 60, Appendix A, Method 19, section 2.1. See footnote 5e for reporting requirements. | [PSD 96-01A conditions 2, 6, 11] [Order No..DE 01AQIS-2056] |
| E.5b | | 217 tons/yr 0.40 lb/mmBtu, 30 day rolling average(see footnote 4e). | Same as for previous limit. | [40 CFR 60.44b(a)(2)(ii)] |
| E.6 | Fuel Consumption | 28,995 tons/yr and 301,128 lbs/D. 7,836,000 gal/yr and 40,683 gal/D | Monitor in lbs/hr and gals/hr using meter with accuracy of +/- 0.5%. Calibrate meter according to manufacturers recommendations. Include items in footnote 1e in monthly report. | First Revision-[Order DE 97AQ-I030 condition 1] and [PSD-96-01A condition 1]. |
| E.7a | Fuel supply | Primary fuel shall be a reprocessed fuel oil. Number 2 fuel oil (0.05% sulfur) may be used as a backup fuel. | Report fuel type used on monthly report. | PSD 96-01A |
| E.7b | | Sulfur ≤0.50% by weight | Analyze all fuel shipments for sulfur using EPA or ASTM approved test methods. Monthly submit a table summarizing the sulfur concentration for all shipments of fuel received to be burned in the boiler. | First Revision-[Order DE 97AQ-I030 condition 3] and [PSD-96-01A condition 1] |

| | | | | |
|------|-----|---|--|--|
| E.7c | | Nitrogen ≤0.138% by weight Ash ≤0.54% by weight | Analyze all fuel shipments for nitrogen and ash using EPA or ASTM approved test methods. Monthly submit a table summarizing concentrations of the listed parameters for all shipments of fuel received to be burned in the boiler. | [PSD 96-01A condition 1] |
| E.8 | CO | 116 ppm @ 7% O ₂ , 24 hour average | Operate boiler within operating conditions specified in PTPC documents TS#4 and SOP#29 (see appendix D). Report excursions in monthly report. Excursions are noted in footnote 3e. | First Revision-Order DE 97AQ-I030 condition 6(a)]. |
| E.9 | VOC | 8 ppm @ 7% O ₂ , 24 hour average | Operate boiler within operating conditions specified in PTPC documents TS#4 and SOP#29 (see appendix D). Report excursions in monthly report. Excursions are noted in footnote 3e. | First Revision-[Order DE 97AQ-I030 condition 6(b)] |

E.10 Port Townsend Paper Corporation has identified in an operation and maintenance (O&M) manual for the boiler, operational parameters and practices that have been described as “good combustion practice.” The O&M manual includes a description of records that will be maintained to insure the continuous application of “good combustion practice.” The pertinent parts of the O&M manual include SOP #29, TS #2, TS #3, TS #4, and a sample package boiler daily records sheet. The O&M manual shall be maintained by Port Townsend Paper Corporation and be available for review by state, federal, and local agencies. (PSD 96-01A condition 9).

E.11 Special reporting requirements (PSD 96-01A conditions 12(d) and 12(e)):
Report monthly the following CEM test data (40 C.F.R 60.49b):

- 1) Days for which data was not collected,
- 2) Reasons for which data was not collected,
- 3) Identification of times when the pollutant concentration exceeds span of the CEM,
- 4) Description of any modifications to the CEM system that could affect the ability of the system to comply with performance specifications 2 or 3, and
- 5) Results of any CEM drift tests.

In addition, Port Townsend Paper Corporation shall maintain monitoring records on site for at least two years, and shall submit:

- 1) Excess emission reports, as appropriate and
- 2) Results of any source tests.
- 3) Records of the nitrogen content, sulfur content, ash content, and heating value (Btu/lb.) of the oil on a per calendar quarter basis.

| Parameter | Limit (shall not exceed) | Monitoring & Reporting | Applicable Requirements |
|-----------|-----------------------------|------------------------|-------------------------|
|-----------|-----------------------------|------------------------|-------------------------|

| | | | | |
|------|-------------|--|--|---|
| E.12 | Fuel supply | <p>Arsenic ≤ 0.4 ppm by weight</p> <p>Cadmium ≤ 0.97 ppm by weight</p> <p>Chlorine ≤ 650 ppm by weight</p> <p>Chromium ≤ 10 ppm by weight</p> <p>Lead ≤ 20 ppm by weight</p> <p>PCBs ≤ 2 ppm by weight</p> | Analyze all fuel shipments for listed parameters using EPA or ASTM approved test methods. Submit results of analysis in subsequent monthly report. The Department may reduce monitoring frequency. | First Revision, Order DE 97AQ-I030 condition 3 and WAC 173-460-150/160. |
|------|-------------|--|--|---|

Footnotes:

- 1e. Fuel consumption items to report (First Revision-[Order 97AQ-I030 condition 1]):
 - the amount of fuel burned daily in pounds and gallons,
 - the total amount of fuel burned during the month in pounds and gallons and
 - the cumulative total of fuel burned during the calendar year in pounds and gallons.
- 2e. Compliance with 40 CFR Subpart Db SO₂ emission limits shall be met by complying with option "a" or "b" listed below. (40 cfr 60.47b(b) and First Revision-Order 97AQ-I030 condition 4).
 - a. The 30-day rolling average of SO₂ emissions from the package boiler shall not exceed 0.80 lb/mmBtu. Compliance shall be determined by burning fuel that does not exceed 0.50% sulfur by weight. The SO₂ emission rate shall be calculated based on fuel sample analysis in accordance with requirement E.6 of this permit and 40 CFR 60.47b(b)(1), (3), and (4). The following information shall be included in the monthly air report.
 - 1) calendar date.
 - 2) daily value and 30 day rolling average for fuel % sulfur.
 - 3) daily value and 30 day rolling average for SO₂ emission rate in lb/mmBtu.
 - 4) identification of each day the 30 day rolling average exceeds the SO₂ emission limit and each day the fuel sulfur concentration exceeds the fuel sulfur specification, including reasons for the excess and a description of any corrective action taken.
 - 5) identification of operating days when fuel sulfur data were not obtained, including justification and any corrective action taken.
 - 6) identification of any operating day data that were excluded from calculations, including justification and any corrective action taken.
 - 7) identification of "F" factor used for calculations, method of determining the factor, and type of fuel combusted.
 - b. Comply with an alternative monitoring method approved by the Environmental Protection Agency (EPA). Before using this option, PTPC shall submit a copy of the EPA approval letter with the approved alternative monitoring program and reporting requirements to the Department.
 - c. For purposes of this condition, a 30-day rolling average consists of 30 consecutive operating days. An operating day means a 24-hour period based on the mill day (between 0600 AM and 0600 AM the following day) during which period any fuel is combusted at any time in the steam generating unit. It is not necessary for the fuel to be combusted continuously for the entire 24-

hour period. If no fuel is burned during a 24-hour period that day is not an operating day for the purposes of the 30-day rolling average.

- 3e. Operation of the package boiler outside of the approved operating conditions either;
continuously for more than one hour, or
for a total of more than four hours on any one day
will constitute an exceedence of the CO and VOC emission limits. All exceedences shall be reported in the monthly air report. (First Revision-Order 97AQ-I030 condition 6(c)).
- 4e. Report monthly the following for each steam generating day (PSD 96-01A condition 12(b)):
- 1) Calendar date,
 - 2) Average hourly NO_x emission rate in lb./mmBtu,
 - 3) Daily and accumulated mass per calendar year of NO_x,
 - 4) The 30-day rolling average NO_x emission rate in lb./mmBtu,
 - 5) Identification of each day the 30-day rolling average is in excess of the NO_x standard, including reasons for the excess and description of the corrective action taken,
 - 6) Identification of any steam generating days for which NO_x data were not obtained, including reasons for not obtaining sufficient data and description of corrective actions taken,
 - 7) Identification of times emission data are excluded from the calculated average emission rate and the reasons for excluding the data, and
 - 8) Identification of the "F" factor used for calculations, the method of determining the factor, and the type of fuel combusted.
- 5e. The particulate matter emission standards and opacity limits shall apply at all times except during startup. Two startup conditions are covered by this condition. Cold startup (from cold to operating condition) is typically expected to occur only a few times a year. Such cold startup scenarios shall be limited to 5 hours. Warm startup (from warm standby condition to operating condition) is expected to occur on a more regular basis. Such warm startup scenarios shall be limited to one hour. This provision does not preclude Port Townsend Paper Corporation from demonstrating that other scenarios are excused from enforcement actions as allowed pursuant to WAC 173-400-107. (PSD 96-01A condition 13).

F. Digester, Multiple-Effects Evaporators

- F.1 The following requirement applies to MEE E-set, C-washer, and Digesters #10, #11, & #12 only:

| | Parameter | Limit (shall not exceed) | Monitoring & Reporting | Applicable Requirements |
|------|-----------|---|--|-----------------------------------|
| F.1a | TRS | 5 ppmv @ 10% O ₂ , unless combusted in a lime kiln or equivalent | Monitoring required by Condition C.5a shall be used to demonstrate compliance with this requirement. | 40 CFR 60.283(a)(1)(i) for limit. |

- F.2 The following **state-only** requirement is not federally enforceable under the federal Clean Air Act:

| | | | | |
|------|-----|--|--|---|
| F.2a | TRS | Treat noncondensable gases to reduce TRS emission equal to reduction achieved by thermal oxidation in a lime kiln; install a backup treatment system | Monitoring required by Condition F.2b shall be used to demonstrate compliance with this requirement. Report venting duration and cause in the monthly air report. | WAC 173-405-040(4) for treatment requirement. WAC 173-401-615 for reporting requirement. |
|------|-----|--|--|---|

The following requirements are federally enforceable under the federal Clean Air Act:

F.3 40 CFR 63 Subpart S (MACT I): LVHC Non-condensable Gas Source Group: Applies to M&D and Batch digester systems, "D" and "E" Multiple effect evaporator systems, Batch digester blow tank, Foul condensate collection tank, Blow heat condenser system, and Turpentine collection system including the Turpentine after condenser.

| | Parameter | Limit | Monitoring & Reporting | Applicable Requirements |
|------|---------------------|---|--|---|
| F.3a | Total HAP emissions | Enclose, collect, and treat all LVHC vent gases. Route to Lime Kiln and/or #10 Power Boiler for destruction. | Perform monthly visual inspection of closed-vent system components as specified in 40 CFR 63.453(k)(1) & (2). | 40 CFR 63.443(c) for HAP management requirement. 40 CFR 63.453(k)(6) for CA. 40 CFR 63.457(d) for leak detection procedure. |
| F.3b | Total HAP emissions | Maintain negative pressure at each enclosure or hood opening. If closed during initial performance test then maintain in the closed position except when sampling, inspection, maintenance, or repairs. | Demonstrate annually that each enclosure opening is maintained at negative pressure as specified in 40 CFR 63.457(e). Take CA as necessary per 40 CFR 63.453. | 40 CFR 63.450(b) for enclosures and closed-vent system standards. 40 CFR 63.453(k)(4) for annual negative pressure check. 40 CFR 63.453(k)(6) for CA. |

| | | | | |
|------|----------------------------|---|---|---|
| F.3c | Total HAP emissions | Operate components operated at positive pressure and located prior to a control device < 500 ppmv above background. | Measure annually for detectable leaks as specified in 40 CFR 63.457(d). Conduct annual assessment by 40 CFR 60, Appendix A, Method 21. | 40 CFR 63.450(c) for enclosures and closed-vent system standards. 40 CFR 63.453(k)(3) for annual positive pressure check. 40 CFR 63.453(k)(6) for CA. |
| F.3d | Total HAP emissions | For non-computer controlled bypass line valves, maintain valve in closed position with seal. | Perform monthly visual inspection of enclosure openings as specified in 40 CFR 63.453(k)(1)&(5). | 40 CFR 63.450(d) for enclosures and closed-vent system standards. 40 CFR 63.453(k)(6) for CA. |
| F.3e | Record-keeping | Comply with 40 CFR 63.10 and 63.454(b) | Prepare and maintain a site-specific inspection plan per 40 CFR 63.454(b). Maintain records for the inspection plan as required. Record periods when LVHC not collected and treated. | 40 CFR 63.10 and 40 CFR 63.454 for recordkeeping and reporting requirements. |
| F.3f | Excess Emissions Allowance | Time of excess emissions divided by total process operating time in a semi-annual reporting period shall not exceed 1% (Excludes periods of startup, shutdown, or malfunction). | If > 1% of the total operating time in a semi-annual period, excluding periods of startup, shutdown and malfunction, then violation of 40 CFR 63.443(c) and (d). | 40 CFR 63.443(e)(1) for excess emission allowance. |

F.4 40 CFR 63 Subpart S (MACT I) and 40 CFR 63 Subpart A the latter based on [40 CFR 63.440(g)] and 40 CFR 63.455: Kraft Pulping Condensate Source Group: Applies to M&D and Batch digester condensate, Digester condensate tank, "D" and "E" evaporator foul condensate off primary feed effects, Turpentine collection system, Concentrator condensate, LVHC NCG condensates, and Foul condensate collection tank.

| Parameter | Limit | Monitoring & Reporting | Applicable Requirements |
|-----------|-------|------------------------|-------------------------|
|-----------|-------|------------------------|-------------------------|

| | | | | |
|------|---------------------|--|---|--|
| F.4a | Total HAP emissions | Enclose, collect, and convey pulping condensates to condensate collection tanks (CCT) and then to the aerated stabilization basin. | The closed collection system must meet 40 CFR Part 63, Subpart RR, Sections 63.960, 63.961, and 63.962; except for the closed vent systems and control equipment (Lime Kiln and #10 Power Boiler) must be operated per 40 CFR 63.443(d) and 63.450. Perform visual inspection every 30 days per 40 CFR 453(l). | [40 CFR 63.446 (a),(b),(d)(1),(e)(2), and (e)(3)] for selected condensate treatment standards. 40 CFR 453(l) for 30-day visual inspection. |
| F.4b | Total HAP emissions | Operate fixed roof and openings of CCT less than 500 ppmv above background. | Perform visual inspection of enclosure opening and closed-vent system at least every 30 days. Annually inspect for detectable leaks using procedures in 40 CFR 63.457(d). (Measure for leaks by 40 CFR 60, Appendix A, Method 21) Report excess emissions according to 40 CFR 63.455. | 40 CFR 63.446(d)(2)(i) for 500 ppm limit. [40 CFR 63.453 (k)(l) and (2)] for 30-day visual inspection check. 40 CFR 63.453(k)(3) for annual positive pressure check. |
| F.4c | Total HAP emissions | Maintain each opening of a CCT in a closed, sealed position at all times except when sampling, removal, or for equipment inspection, maintenance, or repair. | Perform visual inspection every 30 days per 40 CFR 453(l). | 40 CFR 63.446(d)(2)(ii) for CCT management requirements. 40 CFR 453(l) for 30-day visual inspection schedule. |
| F.4d | Total HAP emissions | Equip CCT with a water seal device on the overflow line. | Perform visual inspection every 30 days per 40 CFR 453(l). | [40 CFR 63.962(b)(2)(l)(A)] per 40 CFR 63.446(d)(1) for collection system requirements. 40 CFR 453(l) for 30-day visual inspection schedule. |

| | | | | |
|------|---------------------|---|--|--|
| F.4e | Total HAP emissions | Vent the CCT to a closed vent and incinerate the vent gases in Lime Kiln and/or #10 Power Boiler. | <p>The closed vent system must meet the requirements of 40 CFR 63.450.</p> <p>Annually inspect for detectable leaks using procedures in 40 CFR 63.457(d). (Measure for leaks by 40 CFR 60, Appendix A, Method 21)</p> | <p>40 CFR 63.443(d)(4) for incineration of vented CCT gases.</p> <p>40 CFR 63.446(d)(2)(i) for vent gas management requirements.</p> <p>40 CFR 63.450 for closed vent system management requirements.</p> <p>40 CFR 63.453(k)(3) for annual positive pressure check.</p> |
| F.4f | HAP Collection | Collect at least 7.2 lb HAP/ODTP (oven-dry ton of unscreened brownstock) from condensate. | <p>Monitor surrogate parameters after initial CCA compliance testing. EPA extension granted on surrogate parameters in letter dated 9/10/04.</p> <p>Perform quarterly monitoring per 40 CFR 63.453(j)(3) and 40 CFR 63.457(l).</p> <p>When monitoring is out of range then follow requirements and maintain records per 40 CFR 63.453(p).</p> <p>Report excess emissions according to 40 CFR 63.455.</p> | <p>40 CFR 63.446(c)(3) for collection requirement.</p> <p>40 CFR 63.453(m) for alternate monitoring parameters.</p> |
| F.4g | HAP removal | Biologically treat condensate in aerated stabilization basin and remove at least 6.6 lb/ODTP. | <p>Monitor surrogate parameters after initial CCA compliance testing. EPA extension granted on surrogate parameters in letter dated 9/10/04.</p> <p>Perform quarterly monitoring per 40 CFR 63.453(j)(3) and 40 CFR 63.457(l).</p> <p>When monitoring is out of range then follow requirements and maintain records per 40 CFR 63.453(p).</p> <p>Report excess emissions according to 40 CFR 63.455.</p> | <p>40 CFR 63.446(e)(2)&(4) for condensate treatment standard.</p> <p>40 CFR 63.453(m) for surrogate parameters.</p> |

| | | | | |
|------|----------------|--|--|--|
| F.4h | Record-keeping | Prepare and maintain a site-specific inspection plan | Maintain inspection records as required. | 40 CFR 63.10 for general recordkeeping and [40 CFR 63.454(a) and (b)] for inspection plan. |
|------|----------------|--|--|--|

| | | | | |
|-----|----------------|--|---|---|
| F.5 | Record-keeping | Scope of recordkeeping and duration of records retention | Records must contain at a minimum information described in 40 CFR 63.10(b)(2) and be kept a minimum of 5 years. | 40 CFR 63.10(b)(1) for recordkeeping requirement. |
|-----|----------------|--|---|---|

F.6 PTPC shall comply with applicable requirements prescribed in 40 CFR Part 63, Subpart A, Sections 63.6, 63.7, 63.8, 63.9, 63.10 and Table 1 to Subpart S of Part 63. (40 CFR 63.440(g)).

F.7 40 CFR 63 Subpart S MACT Reporting Requirements: Applies to the equipment listed above in F.3 for LVHC Non-condensable Gas Source Group and F.4 for Kraft Pulping Condensate Source Group.

PTPC shall comply with the reporting requirements in 40 CFR Part 63, Subpart A, and all the requirements in 40 CFR 63.455.

G. Clean Condensate Alternative (CCA)

| | Parameter | Limit & Averaging Period (shall not exceed) | Monitoring & Reporting ¹ | Applicable Requirement(s) |
|-----|---------------------|--|---|---|
| G.1 | Total HAP emissions | Reduce HAP emissions (as methanol) at the levels established in the CCA. | Report periods of condensate non-collection for the CCA for periods in excess of 4% of total operating time (excluding periods of start-up, shutdown, or malfunction) shall constitute a violation of the applicable emission standard. | 40 CFR 63.443(e)(2) for excess emission allowance. |
| G.2 | Total HAP emissions | Perform IPT | Permittee will perform an initial performance test (IPT) that will establish HAPs collection and destruction parameters. | WAC 173-400-075(5) incorporates MACT by reference 40 CFR 63.443(c) for HAP control requirement and 40 CFR 63.447 for CCA alternative. Ecology Letter allowing compliance extension to 3/16/07 |
| | | | | |

G.3

| Parameter | Limit & Averaging Period (shall not exceed) | Monitoring & Reporting ¹ | Applicable Requirement(s) |
|--------------------------------------|--|---|--|
| Total HAP emissions | Enclose, collect, and convey pulping condensates from equipment systems identified in the CCA proposal to the waste water treatment system as an approved alternative to HVLC controls. The pulping process condensate will be discharged below the liquid surface of a biological treatment system that reduces or destroys total HAPs (as methanol). | Permittee will establish levels of collection and biodegradation of HAPs (as methanol) in the wastewater treatment plant during the IPT. Report test results within 60 days of conducting a performance test. | WAC 173-400-075(5) incorporates MACT by reference 40 CFR 63.443(c) for HAP control requirement. 40 CFR 63.453(k) for enclosure and closed vent system management requirements. 40 CFR 63.447 for CCA alternative. |
| | | | |
| G.4 HAP CCA Operational Parameter | Establish the level of over-collection required to meet the CCA requirements of 40 CFR 63.447 | Operational parameter used to confirm HAP collection to be determined during IPT. | 40 CFR 63.447 for CCA alternative 40 CFR 63.453(j)(2) for alternate operational parameter Ecology letter dated May 2, 2003 granting extension for alternate operational parameter until completion of CCA |
| | | | |

| | Parameter | Limit & Averaging Period (shall not exceed) | Monitoring & Reporting ¹ | Applicable Requirement(s) |
|-----|-------------------------------|--|--|--|
| G.5 | HAP CCA Operational Parameter | Confirm operational parameter | Monitor HAP operational parameter established during IPT | 40 CFR 63.447 for CCA alternative. 40 CFR 63.453(j)(2) for alternate operational parameter WAC 173-401-615(1)(c), WAC 173-400-105(5)(h), and 40 CFR 63.8(c)(4) for CMS data recovery |
| G.6 | HAP CCA Operational Parameter | Recordkeeping | Permittee shall maintain all CCA compliance demonstration records, testing, and reporting for a period not less than five years. | 40 CFR 63.10 (b) for record review. |
| G.7 | HAP CCA Operational Parameter | IPT Plan submittal date | Permittee will submit an IPT plan for approval by Ecology at least 60 days prior to execution. | 40 CFR 63.9(e) for approval review |
| G.8 | HAP CCA Operational Parameter | IPT implementation date | Permittee will execute IPT plan and submit results to Ecology within 60 days of the completion of the IPT. | 40 CFR 63.7(g) for reporting deadline |
| G.9 | HAP CCA Operational Parameter | Confirm over collection | Permittee shall perform quarterly testing to confirm collection and destruction of HAPs as determined in the IPT. | 40 CFR 63.447 for CCA 40 CFR 63.543(j)(3) for quarterly testing requirements |

H. Millwide Limits

Millwide limits, except for the TRS limit, apply to aggregate emissions from the recovery furnace, smelt dissolver tank, lime kiln, and power boiler #10. Millwide TRS emission limits apply to the aggregate emissions from the recovery furnace, smelt dissolver tank, lime kiln, power boiler #10, evaporators, and washers.

| | Parameter | Limit (shall not exceed) | Monitoring & Reporting | Applicable Requirements |
|-----|-------------|-----------------------------|------------------------------------|-------------------------|
| H.1 | Particulate | 729 tons/yr | Monitoring and reporting method 1. | [Order DE 00AQIS-131] |
| | | 1007 tons/yr | Monitoring and reporting method 1. | PSD-I |

| | | | | |
|-----|-----------------|--------------|------------------------------------|-----------------------|
| | | 5590 lbs/D | Monitoring and reporting method 3. | PSD-I |
| H.2 | NOx | 645 tons/yr | Monitoring and reporting method 1. | PSD-I |
| | | 3580 lbs/D | Monitoring and reporting method 2. | PSD-I |
| H.3 | CO | 6204 tons/yr | Monitoring and reporting method 1. | PSD-I |
| | | 34500 lbs/D | Monitoring and reporting method 3. | PSD-I |
| H.4 | VOC | 182 tons/yr | Monitoring and reporting method 1. | PSD-I |
| | | 1010 lbs/D | Monitoring and reporting method 3. | PSD-I |
| H.5 | TRS | 31.7 tons/yr | Monitoring and reporting method 1. | PSD-I |
| | | 176 lbs/D | Monitoring and reporting method 2. | PSD-I |
| H.6 | SO ₂ | 1300 tons/yr | Monitoring and reporting method 1. | [Order DE 00AQIS-131] |

Monitoring and reporting methods:

1. Compliance determined by adding calendar year emissions from all applicable units*. Emissions from a unit for which the pollutant is measured shall be calculated using the average of test results collected during the year. Emissions from a unit for which the pollutant is not measured shall be calculated using emission factors and production data or fuel consumption. Report annually within 30 days of the end of the calendar year.
2. Compliance determined by adding daily emissions from all applicable units*. Emissions from a unit for which the pollutant is measured through source testing or continuous emission monitoring shall be calculated using the most recent test results adjusted for production/hours of operation. Emissions from a unit for which the parameter is not directly measured shall be calculated using emission factors and daily production or fuel consumption data. Report monthly.
3. Compliance determined by complying with the annual limit. If annual emissions are greater than 60% of the annual limit, during the following year, compliance shall be demonstrated by monitoring and reporting according to monitoring and reporting method 2.

* Applicable units, except for the TRS limit, include the recovery furnace, smelt dissolver tank, lime kiln, and power boiler #10. Applicable units for the TRS limit include the recovery furnace, smelt dissolver tank, lime kiln, power boiler #10, evaporators, and washers.

I. NESHAPS Startup, Shutdown, and Malfunction (SSM) requirements. See the emission unit specific section of the permit for emission unit applicability. [40 CFR 63(e)(3)(e)]

1. The Permittee shall develop and implement a written startup, shutdown, and malfunction (SSM) plan that describes, in detail, procedures for operating and maintaining the LVHC System during SSM periods, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with [40 CFR 63 Subparts S & MM] standards. The SSM plan shall include the elements set forth in [40 CFR 63.6(e)(3)]. [40 CFR 63.6(e)(3)(i), 4/5/02]
2. During SSM periods, The Permittee shall operate and maintain the pulping process condensates system (including associated air pollution control equipment) in accordance

with the SSM plan. Malfunctions shall be corrected as soon as possible after their occurrence in accordance with the SSM plan, 40 CFR 63.6(e)(3)(ii). [4/5/02]

3. The Permittee shall change the SSM plan if required by Ecology if it is determined to be unacceptable under 40 CFR 63.6(e)(2). [40 CFR 63.6(e)(3)(vii), 4/5/02]
4. The Permittee shall update the SSM plan within 45 days of an SSM event that the plan failed to address or inadequately addressed. [40 CFR 63.6(e)(3)(viii), 4/5/02]

FACILITY-WIDE GENERAL REQUIREMENTS [WAC 173-401-600]

These generally applicable requirements apply facility-wide, including to insignificant emission units or activities. Insignificant emission units or activities, however, are not subject to monitoring, testing, recordkeeping, reporting, or compliance certification requirements.

1. Varying Emission Rate. The permittee cannot vary the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant, except as directed according to air pollution episode regulations. [WAC 173-400-205]
2. Detrimental Emissions. The permittee shall not cause or permit emission of any contaminant if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business. [WAC 173-400-040(5)]
3. Concealment and Masking. The permittee shall not install or use any means that conceal or mask an emission of an air contaminant that would otherwise violate provisions in this permit. [WAC 173-400-040(7)]
4. Fugitive Emissions. The permittee shall take reasonable precautions to prevent the release of air contaminants from emission units engaged in material handling, construction, demolition, or any other operation that is a source of fugitive emissions. Reasonable precautions include but are not limited to application of water as necessary to control fugitive dust or the timely removal or coverage of material piles. [WAC 173-400-040(3)(a)]
5. Fugitive Dust. The permittee shall take reasonable precautions to prevent fugitive dust from becoming airborne and maintain and operate the source to minimize emissions. Reasonable precautions include but are not limited to application of water as necessary to control fugitive dust or the timely removal or coverage of material piles. [WAC 173-400-040(8)(a)]
6. Particulate Matter Deposition. The following condition is **state-only** and is not federally enforceable under the Clean Air Act: No deposit of particulate matter beyond property line so as to interfere unreasonably with use and enjoyment. [WAC 173-400-040(2)]
7. Odors. The following condition is **state-only** and is not federally enforceable under the Clean Air Act: Any person causing odor which may unreasonably interfere with use & enjoyment of property must use recognized good practice and procedures to reduce odors to a reasonable minimum. [WAC 173-400-040(4)]

8. Opacity. The permittee may not cause or allow the emission of a plume from any emission unit other than a kraft recovery furnace, smelt dissolver tank, or lime kiln, which has an average opacity greater than 20% for more than 6 consecutive minutes in any 60 minute period except as provided in WAC 173-405-040(6).
9. Complaints. Except where specific requirements are defined elsewhere, the permittee shall assure compliance with conditions 1 through 8 by recordkeeping of actions taken by the permittee in response to complaints received by the permittee or of possible noncompliance noticed by the facility staff in day to day operations. The permittee shall assess the validity of each complaint and commence corrective action, if warranted, as soon as possible but no later than 3 working days of receiving the complaint. The permittee shall keep records of the following: complaints received; the assessment of validity; and what, if any, corrective action is taken in response to the complaint. [WAC 173-401-630]
10. Sulfur Dioxide Emissions. The emission of sulfur dioxide from any emissions unit other than a recovery furnace or lime kiln shall not exceed 1,000 parts per million for an hourly average, corrected to 7% oxygen for combustion units. [WAC 173-405-040(11)]
11. Reserved
12. Good Air Pollution Control Practice. The permittee shall at all times, including periods of abnormal operation and upset conditions, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to Ecology which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [WAC 173-405-040(10)]
13. Chemical Accidental Release Program. PORT TOWNSEND PAPER IS NOT SUBJECT TO PART 68, AS PER 68.10(a) – NO LISTED CHEMICALS, AS DEFINED IN 68.115 AND 68.130 ARE STORED ON SITE.
14. Stratospheric Ozone Protection.
 - a. The permittee shall comply with applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditions (MVACs) in Subpart B:
 - i. Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to § 82.156.
 - ii. Equipment used during the maintenance, service, repair or disposal must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - iii. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to § 82.161.
 - iv. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to § 82.166 (“MVAC-like appliance” is defined at § 82.152.)

- v. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - vi. Owners/operators of appliances normally containing 50 or more pounds or refrigerant purchased and added to such appliances pursuant to § 82.166.
 - b. Permittee may switch from any ozone-depleting substance to any alternative approved pursuant to the Significant New Alternatives Program (SANP), [40 CFR Part 82, Subpart G, without a permit revision but shall not switch to a substitute listed as unacceptable pursuant to such program. [40 CFR 82.174]
 - c. Any certified technician employed by Permittee shall keep a copy of their certification at their place of employment. [40 CFR 82.166(1)]
 - d. The Permittee shall not willfully release any regulated refrigerant and shall use refrigerant extraction equipment to recover regulated refrigerant that would otherwise be released into the atmosphere. [RCW 7070.94.970(2), 970(4)] State Only
 - e. Compliance with this term and condition will be demonstrated by using a certified contractor or employee.
[40 CFR Section 82 and RCW 70.94.970 (the RCW is a **state-only** requirement)]
15. Insignificant Emission Units. The generally applicable requirements that apply to IEUs are, WAC 173-405-040(5), WAC 173-400-040, WAC 173-400-050(1) & (3), and WAC 173-400-060. [WAC 173-401-530(2)(b)]
16. Volatile Organic Liquid Storage Vessels. The Permittee shall keep records showing the dimensions, capacities, and vapor pressure of contents of all storage vessels having capacities greater than or equal to 75 cubic meters or vapor pressure of contents greater than or equal to 3.5 kPa that are used to store volatile organic liquids and for which construction, reconstruction, or modification commenced after July 23, 1984. These records are to be kept for the life of each storage vessel. [40 CFR 60.116b (a) and (b)]
17. Used Oil Burning. The following condition is **state-only** and is not federally enforceable under the Clean Air Act. The permittee can burn used oil only if it meets the standards prescribed in RCW 70.94.610(1). [RCW 70.94.610]
18. Asbestos. The permittee shall comply with the applicable requirements of 40 CFR Part 61, subpart M (asbestos NESHAP) and WAC 173-400-075 when conducting any renovation or demolition at the facility. [WAC 173-400-075]

MONITORING, RECORDKEEPING & REPORTING

Monitoring Requirements [WAC 173-401-630(5)(b)]

19. Unit-Specific Requirements. The permittee shall conduct routine monitoring of emissions in accordance with the program of monitoring or testing required by specific emission unit conditions of this permit. [WAC 173-405-072].

Source test requirements are dependant on the number of hours a unit is operated.

Units with a specified source test frequency of monthly must be tested each month the unit is operated more than 216 hours (30% of a 30 day month). Also, a source test must be completed during the month if at the end of the month, unit

operation since the end of the month when the last previous source test was run would exceed 720 hours (100% of a 30 day month).

Units with a specified source test frequency of quarterly must be tested each quarter the unit is operated more than 648 hours (30% of three 30 day months). Also, a source test must be completed during the month if at the end of the quarter, unit operation since the end of the quarter when the last previous source test was run would exceed 2160 hours (100% of three 30 day months).

20. Unavoidable Excess Emissions. This condition applies, where applicable, to excess emissions that are claimed to be unavoidable pursuant to WAC 173-400-107. The permittee may include in its reports demonstrations that excess emissions were unavoidable, consistent with the requirements of WAC 173-400-107. The permittee shall have the burden to prove that deviations from permit terms were unavoidable. Excess emissions that are unavoidable are excused and are not subject to penalty. [WAC 173-400-107]
21. Violation Duration. A violation of an emission limit is presumed to commence at the time of the testing, recordkeeping or monitoring indicating noncompliance, and to continue until the time of retesting, recordkeeping or monitoring that indicates compliance. This presumption may be defeated if credible evidence shows that the violation was of longer duration, that there were intervening days during which no violation occurred or that the violation was not continuing in nature. [42 U.S.C. 7413(e)(2)]. The permittee may conduct monitoring or testing more frequently than required by this permit.
22. Insignificant Emission Units. The permittee is not subject to any testing, monitoring, reporting, or recordkeeping for the insignificant emission units or activities listed. [WAC 173-401-530(2)(c)]

Recordkeeping Requirements

23. Monitoring Records. The permittee shall keep records of any periodic and continuous monitoring required by this permit. These records shall include the following, where applicable:
 - a. The date, place as defined in requirement, and time of sampling or measurement;
 - b. The date(s) analysis were performed;
 - c. The company or entity that performed the analysis;
 - d. The analytical techniques or methods used;
 - e. The results of such analysis; and
 - f. The operating conditions existing at the time of sampling or measurement.WAC 173-401-615(2)(a); WAC 173-400-105
24. Inspection Checklists. Where the permittee is required to use and maintain an inspection checklist, the checklist must contain, at a minimum, the following information:
 - a. The person conducting the inspection;
 - b. The date/time of the inspection;
 - c. Location of the inspection;
 - d. The observations made during the inspection;
 - e. Corrective actions taken if any; and
 - f. The date and time corrective action was initiated and completed.[WAC 173-401-615(1)(b)]

25. Changes at Source. The permittee shall keep records describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. [WAC 173-401-724(5).]
26. Records Retention. The permittee shall retain records of all required monitoring data and support information for a period of 5 years from the date of monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all data from continuous monitoring instrumentation, and copies of all reports required by this permit. [WAC 173-401-615(2)(c)]
27. Recording Permit Deviations. The permittee shall maintain a contemporaneous record of any deviation from the requirements of this permit. [WAC 173-401-615(3)(b).]

Reporting Requirements [WAC 173-401-520, -615(3), and -710]

28. Unit Reporting Requirements. In addition to any emission unit specific reporting requirements identified below, emission unit specific reporting requirements are identified in specific emission unit conditions of this permit.
29. Production Reporting. Report within 15 days of the end of each month average daily production of air-dried unbleached pulp. [WAC 173-405-072(4)]
30. Monthly Reports. Monitoring reports required by this permit must be submitted to Ecology within 15 days of the end of each calendar month. [WAC 173-405-072]. The reports must clearly identify all instances of deviations from permit requirements. [WAC 173-401-615(3)(a)]
31. Emission Inventory. The permittee shall submit an inventory of emissions, as specified in WAC 173-405-078, from the source each year no later than 105 days after the end of the calendar year. The permittee shall maintain records of information necessary to substantiate any reported emissions. [WAC 173-405-078 and WAC 173-400-105(1)]
32. Permit Deviations/Excess Emissions. The permittee shall promptly submit a report of any deviations from permit conditions.
 - a. For purposes of this permit, submitting a report “promptly” means the following: (1) if the deviation presents a potential threat to human health or safety, the report shall be made as soon as possible but no later than 12 hours after the discovery of the deviation; (2) for other deviations, “promptly” means that the deviations are identified in the respective monthly report.
 - b. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. The permittee may include in its reports demonstrations that excess emissions were unavoidable, consistent with the requirements of WAC 173-400-107.
[WAC 173-401-615(3)(b) and WAC 173-400-107]
33. Certifications. Any application form, report, or compliance certification submitted pursuant to Chapter 173-401 WAC shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under Chapter 173-401 WAC shall state that, based on information and belief formed

after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [WAC 173-401-520]

34. Report Address. All reports, renewal applications, and compliance certifications required by this permit shall be submitted to:

Department of Ecology
Industrial Section
P.O. Box 47706
Olympia, WA 98504-7600

Compliance certification shall also be submitted to:

Environmental Protection Agency
Air Operating Permits, Region 10
1200 Sixth Avenue, OAQ-108
Seattle, WA 98101-1128

35. Compliance Requirements/Certification.

- a. The permittee shall continue to comply with applicable requirements with which the permittee is in compliance [WAC 173-401-510(2)(h)(ii)(A)];
- b. The permittee shall meet applicable requirements that will become effective during the permit period on a timely basis[WAC 173-401-510(2)(h)(ii)(B)];
- c. The Permittee shall submit a report to the Department of Ecology and to EPA Region X within 105 days after the close of the calendar year, and every year thereafter, certifying compliance with the terms and conditions contained in this permit for the previous calendar year. A report filed in a format approved by Ecology is deemed to meet the requirements of this condition. The initial compliance certification shall cover the period from when the permit is effective to the end of the calendar year. The certification shall describe the following:

The permit term or condition that is the basis of the certification;
The compliance status;
Whether compliance was continuous or intermittent; and
The methods used for determining compliance. [WAC 173-401-630(5)]

The compliance status shall be based on compliance with the final averaging period of the annual certification period. Determination of continuous or intermittent compliance (condition 37c.) shall be based on compliance during the entire annual certification period.

- d. The permittee is not required to certify compliance for insignificant emission units or activities.

[WAC 173-401-530(2)(d)]

STANDARD TERMS & CONDITIONS

36. Duty to Comply. The permittee must comply with all conditions of this chapter 401 permit. Any permit noncompliance constitutes a violation of chapter 70.94 RCW and, for

federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [WAC 173-401-620(2)(a)]

37. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [WAC 173-401-620(2)(b)]
38. Permit Actions. This permit may be modified, revoked, reopened, and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [WAC 173-401-620(2)(c)]
39. Property Rights. This permit does not convey any property rights of any sort, or any exclusive privilege. [WAC 173-401-620(2)(d)]
40. Duty to Provide Information. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205. [WAC 173-401-620(2)(e)]
41. Permit Fees. The permittee shall pay fees as a condition of this permit in accordance with Ecology's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as prescribed in chapter 70.94 RCW. [WAC 173-401-620(2)(f)]
42. Emissions Trading. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit. [WAC 173-401-620(2)(g)]
43. Severability Clause. If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable. [WAC 173-401-620(2)(h)]
44. Permit Appeals. The permittee may appeal this permit or any conditions in it only by filing an appeal with the pollution control hearings board and serving it on the permitting authority within thirty days of receipt pursuant to RCW 43.21B.310. This provision for appeal in this section is separate from and additional to any federal rights to petition and review under § 505(b) of the FCAA. [WAC 173-401-620(2)(i)]
45. Permit Continuation. This permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted. [WAC 173-401-620(2)(j)]

46. Application and Issuance of a Renewal Permit. The permittee shall submit a complete permit renewal application to Ecology no later than six months, but no earlier than 18 months, prior to the expiration date of the existing permit. Permits being renewed are subject to the same procedural requirements, including those for public participation, affected state and EPA review that apply to the initial permit. [WAC 173-401-710(1)&(2)]
47. Inspection and Entry. The permittee shall allow the permitting authority or an authorized representative to perform the following upon presentation of credentials and other documents as may be required by law:
- a. Enter upon the permittee's premises where a chapter 401 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. As authorized by WAC 173-400-105 and the FCAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
- [WAC 173-401-630(2)]
48. Federally Enforceable Requirements. All terms and conditions of this permit, including any provisions designed to limit potential to emit, are enforceable by EPA and citizens under the FCAA, unless they are specifically designated as not federally enforceable. [WAC 173-401-625]
49. Reopening for Cause. This permit shall be reopened and revised under any of the following circumstances:
- a. Additional applicable requirements become applicable when the remaining permit term is greater than three years. Such reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to WAC 173-401-620(2)(j).
 - b. Additional requirements (including excess emissions requirements) become applicable under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated in the permit.
 - c. Ecology determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. Ecology determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- Procedures to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. [WAC 173-401-730]

50. Tampering and False Statements. No person shall make any false material statement, representation or certification in any form, notice or report required in this permit. No person shall render inaccurate any monitoring device or method required under this permit. [WAC 173-400-105(7) and (8), and 40 CFR 70.11(a)]
51. Providing Additional Data. For Ecology to evaluate a plant's emissions or emission control program, the permittee shall furnish other data requested by Ecology. [WAC 173-405-072(5)]

PERMIT SHIELD

Pursuant to WAC 173-401-640(1), compliance with the terms and conditions of this permit shall be deemed compliance with the applicable requirements identified in this permit, as of the date of permit issuance. This permit shield does not exempt the permittee from requirements, determined to be applicable, enacted after the permit issuance date. This permit shield shall not apply to any insignificant emission unit or activity designated under WAC 173-401-530. [WAC 173-401-530(3)]

Pursuant to WAC 173-401-640(2), the Department of Ecology has determined that the requirements listed in Appendix A of this permit do not apply to the facility, as of the date of permit issuance, for the reasons specified.

APPENDICES

APPENDIX A. PERMIT SHIELD/INAPPLICABLE REQUIREMENTS

The following requirements do not apply to the facility as of the date of permit issuance for the reasons indicated:

| CITE | BRIEF DESCRIPTION | REASON |
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| 40 CFR 64 Compliance Assurance Monitoring | CAM Requirements for the following limits: Recovery Boiler Particulate - 0.08gr/dscf @8% O ₂ , one hour average Recovery Boiler Particulate - 0.10gr/dscf @8% O ₂ , one hour average Smelt Tank Particulate - 0.3 lbs/ton BLS, one hour average Lime Kiln Particulate - 0.13 gr/dscf @ 10% O ₂ , one hour average Power Boiler #10 Particulate - 0.10 lb/mmBtu, one hour average | Permit monitoring provisions impose a continuous compliance determination method within the meaning of 40 CFR 64.1, and these applicable requirements are exempt from the CAM Rule per 40 CFR 64.2(b) (vi). |
| WAC 173-400-040 | Meet most restrictive standard where 2 or more units are connected to a common stack, and unit-specific emissions data is not provided. | Facility does not have any emission units with different emission limits connected to a common stack. |
| [WAC 173-400-040(1)] | No visible emissions over 20% opacity for 3 minutes in any one hour, with 4 exceptions. | Opacity standards in the Kraft Pulping Mill regulations (Chapter 173-405 WAC) take precedence over the general emission standards of Chapter 173-400 WAC. WAC 173-405-040. |
| [WAC 173-400-040(3) (b)] | emissions unit identified as a significant contributor to nonattainment must use reasonable and available control methods to control emissions of contaminants for which area is designated nonattainment. | No emissions units at the facility have been identified as a significant contributor to nonattainment. |

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| [WAC 173-400-040(6)] | General limit of 1,000 ppmdv SO ₂ | SO ₂ standards for emissions units at kraft pulping mills in the Kraft Pulping Mill regulations (Chapter 173-405 WAC) take precedence over the general emission standards of Chapter 173-400 WAC. WAC 173-405-040. |
| [WAC 173-400-040(8)(b)] | Sources of fugitive dust identified as significant contributors to a PM-10 nonattainment area must use RACT to control fugitive dust emissions. | Facility not located near a PM-10 nonattainment area. |
| [WAC 173-400-050(1)] | No particulate emissions in excess of 0.1 grain/dscf from combustion units, except no particulate emissions in excess of 0.2 grain/dscf from units combusting wood derived fuels for production of steam. | Particulate standards for combustion sources in the Kraft Pulping Mill regulations (Chapter 173-405 WAC) take precedence over the general emission standards of Chapter 173-400 WAC. WAC 173-405-040. |
| [WAC 173-400-070(2)(a)] | Hog fuel boilers must meet requirements of WAC 173-400-040 & -050(1), with exceptions. | Specific emission standards for combustion sources in the Kraft Pulping Mill regulations (Chapter 173-405 WAC) take precedence over the general emission standards of Chapter 173-400 WAC. WAC 173-405-040. |
| WAC 173-400-100 Registration | Registration required for listed sources, excluding sources subject to the operating permit program, after EPA grants interim or final approval to the state program. | Facility is subject to the operating permit program; EPA has granted interim approval for the state program. |

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| [WAC 173-400-105(5)(a)] | Continuous opacity & SO ₂ monitoring & recording required for fossil fuel-fired steam generators that are not subject to an NSPS, except where capacity is <250 million BTU/hr heat input or where there is an annual avg. capacity factor of ≥30%. | #10 Power Boiler is subject to a NSPS |
| [WAC 173-400-105(5)(d)] | Continuous opacity monitoring & recording required for wood residue fuel-fired steam generators w/ capacity of ≥100 million BTU/hr heat input that are not subject to an NSPS. | #10 Power Boiler is subject to a NSPS |
| [WAC 173-400-105(6)] | Applies to sources that are not subject to operating permit program. | Facility is subject to the operating permit program. |
| WAC 173-400-151 Retrofit requirements for visibility protection | BART required for sources to which significant visibility impairment of a Class 1 area is reasonably attributable. | Facility has not been identified as a source impacting a Class I area. |
| [WAC 173-405-040(7)] [STATE ONLY, NOT FEDERALLY ENFORCEABLE] | Continuously employ best practicable operation and maintenance procedures for recovery furnaces or lime kilns with an alternative opacity limit. | Facility does not have any alternative opacity limits for recovery furnace or lime kiln. |
| WAC 173-405-077 | Provisions of WAC 173-400-105(5) (Report of startup, shutdown, etc.) apply. | Old WAC 173-400-105(5) has been deleted from state regulations and the SIP. |
| [Chapter 173-410 WAC]; Sulfite Pulping Mills | | Facility is not a sulfite pulping mill. |
| [Chapter 173-433 WAC]; Solid Fuel Burning Devices | Applies to wood stoves and fireplaces. | Facility does not operate such devices. |
| [WAC 173-435-040(1)] | Major source, when requested in writing by Ecology must prepare a Source Emission Reduction Plan (SERP) for reducing emissions during ambient air pollution episodes. | Facility has not been requested by Ecology to prepare a SERP. |

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| [WAC 173-435-060(5)] | Cannot refuse entry or access to appropriate enforcement personnel determining compliance with a SERP. | Facility is not required to have a SERP. |
| [Chapters 173-470, 474, 475, 480, 481 WAC]; Ambient Air Quality Standards | | WAC 173-401-200(4)(xii) states that AAQS apply to only temporary sources. |
| [Chapter 173-490 WAC]; Emission Standards and Controls for Sources of VOCs | | Applies only to facility types specified in the regulation; pulp and paper mills are not specified. |
| [40 CFR Part 60 Subpart D] | NSPS for fossil fuel fired steam generators constructed after August 17, 1971. | Recovery furnace constructed in 1968. Since then, there was no occurrence of a physical change or change in method of operation which increased pollutants to which a standard applied. |
| [40 CFR Part 60 Subpart Db] | NSPS for steam generators constructed after June 19, 1984 with a heat input rating >100 mmBtu/hr. | Recovery furnace constructed in 1968. Power boiler #10 constructed in 1977. Since then, there was no occurrence of a physical change or change in method of operation which increased pollutants to which a standard applied. |
| [40 CFR Part 60 Subpart Dc] | NSPS for steam generators constructed after June 9, 1989, with design heat input rating of >10 mmBtu/hr and <100 mmBtu/hr. | Recovery furnace constructed in 1968. Power boiler #10 constructed in 1977. Since then, there was no occurrence of a physical change or change in method of operation which increased pollutants to which a standard applied. |
| [40 CFR Part 60 Subpart BB] | NSPS for Kraft Pulp Mill recovery furnaces constructed or modified after 9/24/76. | Recovery furnace was installed in 1968 and not modified after 9/24/76. |
| | NSPS for Kraft Pulp Mill smelt dissolver tanks constructed or modified after 9/24/76. | Smelt dissolver tank was installed in 1968 and not modified after 9/24/76. |

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| | NSPS for Kraft Pulp Mill including gases from digester systems, brown stock washer systems, or multiple-effect evaporator systems constructed or modified after 9/24/76. | Digesters 1-9 were installed prior to and not modified after 9/24/76. All MEE's, except E-set, and all washers, except C-washers, were installed prior to and not modified after 9/24/76. |
| [Order No. DE93-AQI057] | Concerning electrostatic precipitator replacement. | Rescinded by Ecology, 7/6/93. |
| [40 CFR 60.44(a)(1)] | Applies to subpart D facilities that combust gaseous fossil fuel. | Facility does not combust natural gas. |
| 40CFR 60.42b(b) | Subpart Db SO ₂ emission limits. | Package boiler does not combust coal. |
| [40 CFR 60.42b(c)] | Subpart Db SO ₂ emission limits. | Package boiler does not use emerging technology. |
| [40 CFR 60.42b(d)] | Subpart Db SO ₂ emission limits. | Package boiler does not combust oil other than very low sulfur oil. |
| [40 CFR 60.42b(f)] | Subpart Db SO ₂ emission limits average basis. | Package boiler is not limited to annual capacity factor of 10% or less. |
| [40 CFR 60.43b(c)] | Subpart Db PM emission limits. | Package boiler does not combust wood. |
| [40 CFR 60.43b(d)] | Subpart Db PM emission limits. | Package boiler does not combust solid waste. |
| [40 CFR 60.44b(a)(1)] | Subpart Db NO _x emission limits. | Package boiler does not combust natural gas. |
| [40 CFR 60.44b(a)(2)(i)] | Subpart Db NO _x emission limits. | Package boiler does not combust oil with a low heat release rate. |
| [40 CFR 60.44b(a)(4)] | Subpart Db NO _x emission limits. | Package boiler does not use duct burner in a combined cycle system. |
| [40 CFR 60.44b(b), (c), (d), and (e)] | Subpart Db NO _x emission limits. | Package boiler does not simultaneously combust mixtures of coal, oil, natural gas, solid waste, or byproduct/waste. |
| [40 CFR 60.44b(j)] | Subpart Db NO _x emission limit average basis. | Package boiler is not limited to annual capacity factor of 10% or less. |
| 40 CFR 60 Subpart K | NSPS for petroleum storage vessels constructed or modified after 6/11/73 and prior to 5/19/78. | Fuel oil storage tank constructed in 1932 and not since modified. |

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| 40 CFR 60 Subpart Ka | NSPS for petroleum storage vessels constructed or modified after 5/18/78 and prior to 7/23/84. | Fuel oil storage tank constructed in 1932 and not since modified. |
| 40 CFR 60 Subpart Kb | NSPS for petroleum storage vessels constructed or modified after 7/23/84. | Fuel oil storage tank constructed in 1932 and not since modified. Propane tank (18,000 gal) installed in 1981 and not since modified. |
| 40 CFR 60 Subpart Kb | NSPS for petroleum storage vessels constructed or modified after 7/23/84. | Three oil storage tanks installed in 2002 have maximum true vapor pressure \leq .12 kPa. |
| [40 CFR 63.450(d)(1)] [40 CFR 63.454(e)] | MACT 1 LVHC Non-condensable Gas Source Group: Requirement to install a flow indicator on computer controlled bypass line valves and record flow every 15 minutes | PTPC does not have any computer controlled bypass line valves. |
| [Order DE 01AQIS-3243(E.3)] (that portion referring to computer-controlled bypass valves in the LVHC system). | MACT 1 LVHC Non-condensable Gas Source Group: Recordkeeping for excess emissions from the computer-controlled bypass valves in the LVHC system. | PTPC does not have any computer controlled bypass line valves. |
| 40 CFR 63 Subpart DDDDD | NESHAP for Industrial/Commercial/Institutional Boilers and Process Heaters | The Recovery Furnace is not subject to the Boiler MACT according to 40 CFR 63.7491(f). It is covered by [40 CFR part 63, subpart MM]. |
| [Order DE 93-AWI063] | Concerning limiting emissions from the recovery furnace corresponding with issuance of a Certificate of Emission Reduction Credit | Superseded and repealed by Order DE 00AQIS-131, dated March 16, 2000. |
| Order DE 88-195 | NOC Order requiring installation of a Waterloo scrubber at Power Boiler #10 and setting appropriate conditions. | Superseded and repealed by Order DE 00AQIS-131, dated March 16, 2000. |

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| Order DE 87-107 | Order requiring demonstration of backup boiler start up in compliance with opacity limits. | Superseded and repealed by Order DE 00AQIS-131, dated March 16, 2000. |
| Order DE 85-209 | Order requiring monthly particulate source testing at Power Boiler #10. | Superseded and repealed by Order DE 00AQIS-131, dated March 16, 2000. |
| [Order DE 84-390 (not including Appendix A, PSD I)] | Order and NOC limiting mill emissions and emissions associated with a mill expansion to produce approximately 650 tons per day of unbleached Kraft pulp and paper. Appendix A of the Order is PSD-I which addresses PSD issues associated with the mill expansion. PSD-I was not modified and is included as Appendix A to Order DE 00AQIS-131 dated March 16, 2000. | Superseded and repealed by Order DE 00AQIS-131, dated March 16, 2000. Note: This Order contains PSD-I in its Appendix A. |
| Order DE 82-291 | Concerning noncondensable gas (NCG) venting. | Superseded and repealed by Order DE 00AQIS-131, dated March 16, 2000. |
| All Orders issued prior to 1984 | --- | Superseded and repealed by Order DE 00AQIS-131, dated March 16, 2000. |
| [40 CFR 63.864(10)]: Portion related to pressure drop. [40 CFR 63.864 (10) (i)] | Installation of a CPMS that records pressure drop. Continuous measurement and recordkeeping of the pressure drop across the scrubber. | For the Smelt Tank (emission unit "B") this requirement was waived by Ecology |
| [40 CFR 63.443 (a) (1) (v)] | Control HAP emissions from oxygen delignification systems by April 17, 2006. | PTPC does not have an oxygen delignification system. |
| [40 CFR 63.443 (d) (1), (2), and (3)] | Control devices used to reduce LVHC HAP emissions. | PTPC has implemented 40 CFR 63.443(d) (4) as its choice to reduce HAP emissions. |
| [40 CFR 63.446 (c) (1) and (2)] | HAP-containing pulping process condensates from equipment systems. | PTPC has implemented 40 CFR 63.446(c) (3) as its choice. |

| | | |
|---|---|--|
| [40 CFR 63.453 (b), (c), (d), (e), (f), (g), and (h)] | 40 CFR Part 63 Subpart S monitoring requirements. | PTPC does not operate a thermal oxidizer, gas scrubber, bleaching system, or steam stripper. |
| [Order No. DE 00AQIS-131, Table 1, E.1 & E.2.] | Power Boiler #2 limits. | Power Boiler #2 has been decommissioned. |

APPENDIX B - FORMULAS FOR EMISSION CALCULATIONS

NOTE: The Permittee may use an equivalent alternative method with written approval by Ecology

Averages over time specified in emission limits shall be determined by the arithmetic mean of measurements taken during the specified time period.

Permit Condition B.1

$$\frac{\text{lbs}}{\text{ton BLS}} = (\text{concentration} \times \text{air flow rate} \times \text{unit conversion factor} \times \text{time adjustment}) \div \text{tons BLS burned}$$

Concentration is measured using a reference method to measure particulate concentrations in gr/dscf.

Air Flow Rate must be representative of operation. Air flow measured during the test or a "f" factor from the federal register times heat input may be used.

Unit Conversion Factor is case specific. For particulate conversions 1 lb = 7,000 grains.

Time Adjustment is case specific and is dependent on the flow rate time unit. The measured unit is multiplied by the conversion factor to attain the desired time unit.

Tons BLS Burned is the tons of black liquor solids burned during the adjusted time period.

Permit Conditions D.1, D.3, D.4, E.1a, E.3, and E.4, E.5a

$$\frac{\text{lbs}}{\text{mmBtu}} = (\text{concentration} \times \text{air flow rate} \times \text{unit conversion factor} \times \text{time adjustment}) \div \text{mmBtu applied}$$

Concentration is measured using a reference method or continuous monitor. Particulate concentrations are in gr/dscf and chemical concentrations are in ppm.

Air Flow Rate must be representative of operation. Air flow measured during the test or a "f" factor from the federal register times heat input may be used.

Unit Conversion Factor is case specific. For particulate conversions 1 lb = 7,000 grains. For ppm measurements, molar mass and molar volume for the chemical being measured are used.

Time Adjustment is case specific and is dependent on the flow rate time unit. The measured unit is multiplied by the conversion factor to attain the desired time unit.

mmBtu Applied is the millions of Btu's in the fuel burned during the adjusted time period.

Permit Conditions E.1a, H.1 - H.6 (for directly measured emissions),

$$\frac{lbs}{day} = concentration \times air \text{ flow rate} \times unit \text{ conversion factor} \times time \text{ adjustment}$$

Concentration is measured using a reference method or continuous monitor. Particulate concentrations are in gr/dscf and chemical concentrations are in ppm.

Air Flow Rate must be representative of operation. Air flow measured during the test or a "f" factor from the federal register times heat input may be used.

Unit Conversion Factor is case specific. For particulate conversions 1 lb = 7,000 grains. For ppm measurements, molar mass and molar volume for the chemical being measured are used. PM₁₀ as a fraction of PM is based on either historical test data or AP-42 factors.

Time Adjustment is case specific and is dependent on the flow rate time unit. The measured unit is multiplied by the conversion factor to attain the desired time unit.

$$\frac{tons}{year} = \sum \frac{lbs}{day} \text{ for the calander year} \times unit \text{ conversion factor}$$

Unit Conversion Factor is 1 ton = 2000 lbs.

APPENDIX C - Reserved

APPENDIX D - ORDERS, PERMITS, AND OPERATIONAL PRACTICES

First Revision - NOC Order No. DE 97AQ-I030

No. PSD-96-01A

Order No. DE 00AQIS-131

No. PSD-I (Appendix A of Order No. DE 00AQIS-131)

Package Boiler Operational Practices:

Technical Support #4

Standard Operating Procedure #29

APPENDIX E - DEFINITIONS OF ABBREVIATIONS USED IN PERMIT

| | |
|-----------------|---|
| ADMT | air dry metric ton |
| average | arithmetic average |
| avg | average |
| BACT | Best available control technology |
| BART | Best available reasonable technology |
| BDMT | bone dry metric ton |
| BL | black liquor |
| BLS | black liquor solids |
| BTU | British thermal unit |
| CA | corrective action |
| CCT | condensate collection tank |
| CEM | continuous emission monitor |
| CFR | Code of Federal Regulations |
| CO | carbon monoxide |
| DOE | Department of Ecology |
| dscf | dry standard cubic foot |
| EPA | Environmental Protection Agency |
| ESP | electrostatic precipitator |
| FCAA | Federal Clean Air Act |
| gpm | gallons per minute |
| gr | grain |
| HAP | hazardous air pollutant |
| IEU | insignificant emission unit |
| kg | kilogram |
| lbs | pounds |
| LM | lime mud |
| MACT | maximum available control technology |
| MMBTU | million British thermal units |
| NOx | oxides of nitrogen |
| NCG | noncondensable gas |
| NSPS | new source performance standards |
| PM | particulate matter |
| PM-10 | particulate matter less than 10 microns in diameter |
| ppm | parts per million |
| ppmdv | part per million dry volume |
| PTPC | Port Townsend Paper Corporation |
| RACT | Reasonable available control technology |
| RCW | Regulatory Code of Washington |
| SERP | source emission reduction plan |
| SIP | state implementation plan |
| SO ₂ | sulfur dioxide |
| tpy | tons per year |
| TRS | total reduced sulfur |
| TS | technical support |
| TSP | total suspended particulate |
| U.S.C. | United States Code |
| VOC | volatile organic compound |
| WAC | Washington Administrative Code |

APPENDIX F.
Footnote Key

1. Monitoring is required only when emission unit is operating.
2. If monitored emissions are equal to or less than 75% of the emission limitation for any six consecutive months, emissions will be monitored by three 1-hour test per quarter and reported quarterly.

If monitored emissions are less than or equal to 65% of the emission limitation for any four consecutive quarters, emissions will be monitored by three 1-hour tests per year and reported annually.

If monitored emissions are less than or equal to 50% of the emission limitation for any four consecutive quarters, emissions may be monitored by one 1-hour test per year and reported annually.

Three 1-hour tests averaging less than or equal to 50% of the limitation qualify for the 1-hour annual test per year option. The permittee shall conduct source testing within 105 days between two consecutive quarterly tests. If monitored emissions exceed the current threshold, the monitoring frequency will revert to the previous frequency.
[WAC 173-401-615, or underlying applicable air order as basis for testing frequency flexibility]
3. through 10. - Reserved.
11. CMS Data Recovery. State and federal regulations recognize that monitoring data may be lost for legitimate reasons. The permittee may be exempted from monitoring and reporting requirements during periods of monitoring system malfunctions, provided that the permittee shows that the malfunction was unavoidable and is being repaired as expeditiously as practicable. [40 CFR §60.13(e); 40 CFR 63.8(c)(4); WAC 173-400-105(5)(h); WAC 173-405-077]

The permittee shall make every effort to acquire, maintain, and recover valid monitoring data. CMS downtime and resulting monitoring data loss due to malfunctions shall be less than 10% of the monthly unit operating time. An acceptable explanation for the loss of monitoring data must be provided in the monthly report. Periods when CMS data is not recovered due to daily calibration, zero and span checks are not considered nor reported as CMS downtime in the monthly report. Records of daily calibration, zero and span checks shall be kept for a period of five years and made available upon request to Ecology.
[WAC 173-401-615(1)(c); WAC 173-401-630(1)]
12. MACT CMS Performance Reports. The permittee shall record and report CMS downtime in the semi-annual MACT report. [40 CFR 63.10(e)]
13. NSPS CMS Performance Reports. The permittee shall record and report CMS downtime in the semi-annual report. [40 CFR §60.7(c) and (d) (2/12/99)]
14. WA PSD/NSR/SIP CMS Performance Reports. The permittee shall record and report CMS downtime, other than calibration, zero and span checks, in the monthly report. In the case of monitor downtime due to system malfunctions, the report will address whether the malfunction was unavoidable, and repaired as expeditiously as practicable.
[WAC 173-400-105(5)(h); WAC 173-405-077; WAC 173-401-615(1)(c); WAC 173-401-630(1)]